#### COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION AND NOTICE OF THE	)		
AQUA CORPORATION (KENTUCKY WATER	j		
SERVICE CO., INC.) FOR AN ADJUST-	j	CASE NO.	89-340
MENT OF RATES IN MIDDLESBORO AND	j		
CLINTON, KENTUCKY	j		

# ORDER

Having reviewed Aqua Corporation's ("Aqua's") responses to the Commission's Orders of March 14, 1990 and May 11, 1990, the Commission finds that Aqua has not adequately responded to said Orders and that the procedural schedule established in the Commission's Order of April 24, 1990 should be amended to ensure that the Commission has sufficient information upon which to base its decision in this proceeding.

IT IS THEREFORE ORDERED, on the Commission's own motion, that the procedural schedule set forth in its Order of April 24, 1990 be and it hereby is amended to permit the following supplemental requests for information to Aqua.

IT IS FURTHER ORDERED that Aqua shall file an original and 12 copies of the following information with the Commission, with a copy to all parties of record, by July 12, 1990. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness

who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. When applicable, the information requested herein should be provided for total company operations and individual operations, separately. If the information cannot be provided by this date, Aqua should submit a motion for an extension of time stating the reason an extension is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission.

- 1. Refer to your response to Item 1 of the Commission's May 11, 1990 Order:
- a. The general rule for the regulatory treatment of Contributions in Aid of Construction ("CIAC") is that, "any such contributions should be excluded from rate base, since the related plant investment has not been financed by the utility, and customers should not therefore be required to pay a return on this plant." Explain your perception of this prescribed treatment and how it relates to your response.
- b. Customer advances are deducted from rate base because, "The utility plant constructed with these funds is not

Accounting for Public Utilities by Robert L. Hanne and Gregory E. Aliff (Deloitte, Haskins & Sells), page 4-32.

financed with debt or equity; ratepayers should not, therefore, be obligated to pay a return on these plant investments."<sup>2</sup> Explain your perception of this prescribed treatment and how it relates to your response.

- c. The general rule for the regulatory treatment of accumulated deferred taxes is that, "these reserves represent a source of interest-free funds supplied by the U.S. Treasury that the utility is free to use in support of its rate base investment. Therefore, the rate base must be reduced by deferred tax reserve balances to avoid paying a return on funds that are cost free." Explain your perception of this prescribed treatment and how it relates to your response.
- 2. In response to Item 2 of the Commission's May 11, 1990 Order, Aqua stated that it had made adjustments to rate base, depreciation expense, and interest expense to reflect the proposed plant improvement of \$150,000. What effect will the plant improvement have on Middlesboro's deferred taxes? Provide all workpapers and calculations.
- 3. In response to Item 3 of the Commission's May 11, 1990 Order, Aqua stated that the proposed \$150,000 plant improvement would be completed in July 1990. When available, provide the completion date, a detailed listing of the actual construction cost incurred, and an explanation of any cost over- or under-runs.

<sup>2</sup> Ibid.

<sup>3 &</sup>lt;u>Ibid</u>., page 4-36.

- 4. In response to Item 4 of the Commission's May 11, 1990 Order, Aqua estimated that the proposed plant improvement would result in one new residential customer and one municipal fire hydrant. Provide Aqua's basis for the estimated additional customers that will be added due to the new supply main (include all workpapers and calculations).
- 5. Refer to your response to Item 5 of the Commission's May 11, 1990 Order:
- a. Provide the number of customers that are currently being served by the 24-inch back-up main.
- b. Provide the number of customers that are currently being served by the 8-inch back-up main.
- c. Provide a detailed schedule of the test-period expenses and revenues that are associated with the 8-inch and 24-inch back-up mains. Provide all workpapers and calculations.
- 6. In Case No. 9059, 4 the Commission established the following set of criteria that a utility must meet in order to justify plant investment in excess of the net original cost (plant acquisition adjustment): (1) the purchase price was established upon arms-length negotiations; (2) the initial investment plus the cost of restoring the facilities to required standards will not adversely impact the overall costs and rates of the existing and new customers; (3) operational economies can be achieved through

Case No. 9059, An Adjustment of Rates of Delta Natural Gas Company, Inc., Order dated September 11, 1989.

the acquisition; (4) the purchase price of utility and non-utility property can clearly be identified; and (5) the purchase will result in overall benefits in the financial and service aspects of the utility's operations. Provide the appropriate documentation to demonstrate that the aforementioned criteria has been met in Aqua's purchase of Middlesboro.

- 7. Refer to your responses to Items 7a and 8a of the Commission's May 11, 1990 Order:
- a. Aqua informed the Commission that Middlesboro and Clinton do not have individually identified capital accounts except for earned surplus and that for the purpose of this case capital was allocated between the two divisions based on specific asset and liability accounts. Provide detailed workpapers and/or calculations showing the allocation of capital as requested in Item 38 of the Commission's March 14, 1990 Order.
- b. Are any other rate base or capital items based on allocations or estimates? If so, identify which items and provide detailed workpapers and/or calculations.
- 8. Refer to your responses to Items 7b and 8b of the Commission's May 11, 1990 Order:
- a. Middlesboro's test-period capital structure is approximately 91 percent debt and 9 percent equity and Clinton's test-period capital structure is approximately 80 percent debt and 20 percent equity. Briefly explain if Middlesboro's and Clinton's capital structures would be a riskier investment than a utility with a capital structure of 60 percent debt and 40 percent equity.

- b. Based on a 60/40 debt-to-equity ratio, the requested rate of return of 10.5 percent, and Middlesboro's imbedded cost of debt, impute the rate of return on capital for Middlesboro as shown in Format 7b. Provide all workpapers and calculations.
- c. Based on a 60/40 debt-to-equity ratio, the requested rate of return of 10.5 percent, and Clinton's imbedded cost of debt, impute the rate of return on capital for Clinton as shown in Format 7b. Provide all workpapers and calculations.
- 9. Refer to your responses to Items 7c and 8c of the Commission's May 11, 1990 Order:
- a. To reconcile Middlesboro's test-period rate base and capital structure, Aqua deducted its proposed capital improvement of \$150,000; however, the debt to finance the improvement remains in its capital structure. Explain why the investment was deducted from rate base while the associated financing was not removed from Middlesboro's capital structure.
- b. If Middlesboro's capital structure is reduced by the financing associated with its plant improvement, rate base will exceed capital structure by \$150,000. Provide a reconciliation of the difference in rate base and capital structure.
- c. To reconcile Middlesboro's and Clinton's rate base and capital structure, Aqua reduced both rate bases by each division's cash working capital. How are these working capital amounts funded? Have any studies been performed to determine

actual cash working capital requirements? If yes, provide a copy of the study.

- 10. Refer to your response to Item 9 of the Commission's May
  11. 1990 Order:
- a. Middlesboro's pro forma debt of \$150,000 has an interest rate of 10.92 percent, yet Aqua stated that this is the basis for its requested rate of return of 10.5 percent. How did Aqua arrive at its requested rate of return? Provide all workpapers and calculations.
- b. What effect would a utility's capital structure have on its requested rate of return?
- c. Did Aqua consider any other method for computing Middlesboro's and Clinton's revenue requirements other than rate base? If yes, provide a list of each method considered and the reasons for Aqua's rejection.
- d. It has been the Commission's past practice to base a utility's return on rate base on its overall cost of capital, which the Commission did in Kentucky Water Service Company's last general rate case. Explain why the overall cost of capital should not be used for Middlesboro and Clinton.
- e. Based on Middlesboro's requested revenue increase and pro forma operations, compute its operating ratio, debt

Case No. 8370, Notice of Kentucky Water Service Company, Inc., of Adjustment of Water Rates in Somerset, Middlesboro, and Clinton, Kentucky, and Environs, on November 9, 1981, Order dated April 9, 1982.

- service coverage ("DSC"), and times interest earned ration ("TIER"). Provide all workpapers and calculations.
- f. Based on Clinton's requested revenue increase and pro forma operations, compute its operating ratio, DSC, and TIER. Provide all workpapers and calculations.
- 11. In response to Item 10 of the Commission's May 11, 1990 Order, Aqua provided a schedule of its employees hours and wages by account for Middlesboro and Clinton. Provide a reconciliation of the account totals contained in this schedule with the test-period totals in Exhibit 10 and revised Exhibit 10-A.
- 12. In response to Item 15 of the Commission's May 11, 1990 Order, Aqua stated that the test-period depreciation was estimated based on the July 1989 depreciation schedule that was provided. Upon review of the July 1989 depreciation schedule, it appears that Aqua's depreciation expense was based on a mixture of both straight line and accelerated depreciation methods. Provide all workpapers and calculations of the estimated test-period depreciation expense. Recalculate test-period depreciation expense based solely on the straight line method.
- 13. Refer to your response to Item 16 of the Commission's May 11, 1990 Order:
- a. Provide Aqua's definition of interest synchronization.
- b. Aqua stated that it does not agree with interest synchronization for utility's whose rate base exceeds outstanding debt because it would artificially inflate the return on rate base. Was it Aqua's intent to state that rate base exceeds

capital structure? If no, would Aqua agree that for the majority of utility's that rate base would exceed outstanding debt?

- c. What would be the effect if a utility's capital structure exceeded its rate base?
- d. Given Middlesboro's and Clinton's weighted cost of debt and requested rate bases, calculate interest expense for each using interest synchronization. Provide all workpapers and calculations.
- e. Calculate the effect interest synchronization would have on Middlesboro's and Clinton's interest expense, income tax, and revenue requirement. Provide all workpapers and calculations.
- 14. The Tax Reform Act of 1986 requires that utility's use a normalization method of accounting for deferred income taxes resulting from accelerated depreciation. Has Aqua adopted a normalization method? If yes, provide the test-period amortization of the state and federal deferred income taxes. Provide all workpapers and calculations.
- 15. What effect would the failure to gross-up Middlesboro's and Clinton's revenue requirements to include income taxes on income taxes have on Aqua's requested rate of return?

Done at Frankfort, Kentucky, this 29th day of June, 1990.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director

## AQUA CORPORATION

## Case No. 89-340

## Calculation of Rate of Return Based on Rate Base

Class of Capital

Amount (b)

Percent of Total (c)

Cost Rate (d)

Weighted Cost Rate<sup>2</sup> (e)

Long-Term Debt Pro Forma Debt Common Stock Additional Capital Earned Surplus

Line Item Amount (Col. b) - Total Amount. (Col. b).

<sup>&</sup>lt;sup>2</sup>Col. c Times Col.d; Total e = Requested Rate of Return of 10.5 Percent.